

AMENDMENT

U.S. Appl. No. 10/621,615
Page 2

IN THE CLAIMS

Please amend claim 10 and add new claims 17-28 as indicated below.

1. (Previously Presented) A motor vehicle assembly having an internal combustion engine, an exhaust gas treatment system associated with it, and a fuel cell system, characterized in that the fuel cell system is thermally coupled to the internal combustion engine and/or the exhaust gas treatment system.
2. (Previously Presented) A motor vehicle assembly as specified in claim 1, wherein the fuel cell system is thermally coupled to an intake area of the internal combustion engine and/or an engine coolant circuit of the internal combustion engine.
3. (Previously Presented) A motor vehicle assembly as specified in claim 1, wherein the fuel cell system is thermally coupled to an exhaust gas return line of the internal combustion engine.
4. (Previously Presented) A motor vehicle assembly as specified in claim 3, wherein the exhaust gas return line is an internal exhaust gas return line of the internal combustion engine.
5. (Previously Presented) A motor vehicle assembly as specified in claim 1, wherein the thermal coupling may be engaged and disengaged.
6. (Previously Presented) A motor vehicle assembly as specified in claim 1, wherein the thermal coupling is available only during the cold start phase of the internal combustion engine or the cold start phase of the exhaust gas treatment system.

AMENDMENT

U.S. Appl. No. 10/621,615
Page 3

7. (Previously Presented) A motor vehicle assembly as specified in claim 1, wherein the thermal coupling is effected by way of at least one medium.

8. (Previously Presented) A motor vehicle assembly as specified in claim 7, wherein the medium is at least one gas, at least one liquid, and/or at least one solid.

9. (Previously Presented) A motor vehicle assembly as specified in claim 1, wherein the thermal coupling is effected by a system of comprising at least one heat exchanger.

10. (Currently Amended) A motor vehicle assembly as specified in claim 1 having an internal combustion engine, an exhaust gas treatment system associated with it, and a fuel cell system, characterized in that the fuel cell system is thermally coupled to the internal combustion engine and/or the exhaust gas treatment system, wherein the fuel cell system has a heat dissipation system and wherein the thermal coupling is connected to the heat dissipation system by way of at least one branch line.

11. (Previously Presented) A motor vehicle assembly as specified in claim 10, wherein the heat dissipation system of the fuel cell system conducts a hot medium, wherein the hot medium is coupled to an air intake area, an exhaust gas return line, and/or an exhaust gas treatment system.

12. (Previously Presented) A motor vehicle assembly as specified in claim 10, wherein the heat dissipation system is in the form of a coolant circuit and wherein the coolant circuit and the engine coolant circuit have a common coolant circuit.

13. (Previously Presented) A motor vehicle assembly as specified in claim 10, wherein there is associated with the heat dissipation system at least one reformer, at least one gas cleaning system, and/or at least one fuel cell.

AMENDMENT

U.S. Appl. No. 10/621,615
Page 4

14. (Previously Presented) A motor vehicle assembly as specified in claim 1, characterized by a control unit which covers the cold start phase and which engages the thermal coupling when the cold start phase is present.

15. (Previously Presented) A motor vehicle assembly as specified in claim 14, wherein the thermal coupling is disengaged by the control unit when the cold start phase is not present.

16. (Previously Presented) A motor vehicle assembly as specified in claim 2, wherein the intake area is an air intake area.

17. (New) A motor vehicle assembly as specified in claim 1, wherein said fuel cell system is thermally coupled to the internal combustion engine and/or the exhaust gas treatment system through a gas conduit.

18. (New) A motor vehicle assembly comprising:
an internal combustion engine,
an exhaust gas treatment system,
a fuel cell system, and
a thermal coupling directly between said fuel cell system and at least one of said internal combustion engine and said exhaust gas treatment system.

19. (New) The motor vehicle assembly of claim 18, wherein said thermal coupling comprises a conduit for conveying an output of said fuel cell system directly to said at least one of said internal combustion engine and said exhaust gas treatment system.

AMENDMENT

U.S. Appl. No. 10/621,615

Page 5

20. (New) The motor vehicle assembly of claim 18, wherein said fuel cell system comprises a reformer for outputting a reforming product, and said thermal coupling comprises a conduit for transporting said reforming product.

21. (New) The motor vehicle assembly of claim 18, further comprising at least one shutoff valve between said fuel system and said at least one of said internal combustion engine and said exhaust gas treatment system, said at least one shutoff valve operable to disconnect said thermal coupling.

22. (New) The motor vehicle assembly of claim 21, further comprising at least one sensor for sensing operating conditions of said assembly, and in response to said operating conditions, actuating at least one of said at least one shutoff valve.

23. (New) The motor vehicle assembly of claim 21, wherein at least one of said at least one sensor is selected from the group consisting of a temperature sensor and a gas composition sensor.

24. (New) A method of operating a motor vehicle assembly comprising:
starting each of an internal combustion engine and an exhaust gas treatment system;
operating a fuel cell system; and
conveying heat from said fuel cell system to at least one of said internal combustion engine and said exhaust gas treatment system.

25. (New) The method of claim 24, wherein said operating step comprises producing a gas containing said heat, such that said conveying step comprises conveying said gas from said fuel cell system to said at least one of said internal combustion engine and said exhaust gas treatment system

AMENDMENT

U.S. Appl. No. 10/621,615
Page 6

26. (New) The method of claim 25, wherein said gas is a reforming product.

27. (New) The method of claim 24, further comprising selectively activating and deactivating said conveying step in response to one or more sensed conditions within said assembly.

28. (New) The method of claim 27, wherein after operating said fuel cell system, said conveying step is delayed until said heat is at a predetermined temperature.